

Nicki: Welcome to the Healthy Rebellion Radio. This is an episode of Salty Talk, a deep dive into popular and relevant health and performance news pieces mixed with the occasional salty conversation with movers and shakers in the world of research, performance, health, and longevity. Healthy Rebellion Radio Salty Talk episodes are brought to you by Drink LMNT, the only electrolyte drink mix that's salty enough to make a difference in how you look, feel, and perform.

We co-founded this company to fill a void in the hydration space. We needed an electrolyte drink that actually met the sodium needs of active people, low-carb keto, and carnivore adherence without any of the sugar, colors, and fillers found in popular commercial products. Health rebels, this is Salty Talk.

And now the thing our attorney advises. The contents of this show are for entertainment and educational purposes only. Nothing in this podcast should be considered medical advice. Please consult your licensed and credentialed functional medicine practitioner before embarking on any health, dietary, or fitness change. And given that this is salty talk, you should expect the occasional expletive.

Robb: Welcome back, everybody.

Nicki: Hello. Hello. We are back with a Salty Talk this week. This is Salty Talk Episode 46, and we've got Diana Rodgers who had a nice conversation with Rob. Do you want to share a little bit about what you guys talked about?

Robb: Yeah, I mean, we did some of the usual stuff, which was unpacking a Walter Willett Harvard School of Public Health research paper that is making another splash in the airwaves, red meat consumption, theoretically increases type 2 diabetes risk by 69%.

Nicki: Don't eat any red meat folks.

Robb: Or you will develop type 2 diabetes. And we got into... It's really fascinating, the number of conflicts of interest that Walter Willett has. He's the head of the School of Public Health and has been a fixture of Harvard School of Public Health for three decades, if not longer. And the guy has a massive list of undisclosed conflicts of interest. And just because somebody receives money and funding from various industries, it doesn't automatically make research questionable, but it has a tendency to. And so when you-

Nicki: And when you say undisclosed, it's not like...

Robb: You are supposed to when publish... Let's say you're writing, which Willett it did this. He wrote a piece on the virtues of peanuts and walnuts, which I would probably sign off on that too. But when it came time to, "Were there any conflicts of interest on this?" He said, "None." And he's received a half million dollars over the last couple of years from peanut and walnut interests. And not he specifically, but the department that he is a part of, and this was definitely

underwriting the process.

Nicki: How is that even legal?

Robb: Well, I mean the legality, I can't really comment on.

Nicki: I mean, ethically.

Robb: Ethically, it absolutely should not be happening.

Nicki: I'm going to run real quick.

Robb: Nikki is going to go deal with the dog. We're out in the new studio and we got our first snow. It's actually remarkably cold here. And so the dogs were out for a little while and then they started scratching at the door, and Dutch, being the full figure gal that he is when he scratches on the door, it sounds like the door is going to come down.

Nicki: This is true. Rob has been lamenting all day. He's like, "I don't think I'm ready for winter."

Robb: Not sure if I am. But it's like, "Ready or not, here it is."

Nicki: It's here, folks. It's here.

Robb: Yeah. So we talked about that. And then also this episode will appear both here and at the Sustainable Dish podcast. And this will be Diana's last podcast there.

Nicki: Her last episode of Sustainable Dish.

Robb: Sustainable Dish. She will be on other folks' podcasts. She still has a good amount of work that she's doing. But as we discussed in the episode, Diana has really given at the office on this. She has spearheaded this exploration of the interface between sound nutrition and regenerative ag in a way that literally nobody else has. And the kind of cool thing there's a... I talked a little bit about the anxiety that I had when first getting into this whole ancestral health paleo diet scene, which was, "If I died, then maybe this whole thing would just disappear." It's really interesting not to divert this thing too far. But there was a guy, an Australian physician, and I did a blog post about him, and in the mid-1960s, he hypothesized that most autoimmune disease came from the gut. He predicted the existence of zonulin, which is the enzyme that is critical in the tight junctions in the gut.

He actually spun up some clinics that were addressing autoimmune disease and the guy died in an auto accident, and then it just disappeared from the face of the earth. Nobody there was able to maintain and replicate his work, and it was far enough a field from what was for ages, rheumatologists and all physicians just were of the opinion that diet had no influence on these disease

states. And so I had some anxiety around that. But Diana and I talked about like, "The cat's out of the bag on most of this stuff." And even the regenerative ag scene, there are a lot of people doing really, really phenomenal work, and so it's time for her to move on.

Nicki: Awesome. Can we turn this thing off? My leg is on fire.

Robb: Yeah, I was trying to figure out what you were doing.

Nicki: We have this parabolic heat dish.

Robb: Nikki's over here doing this dance.

Nicki: My right quad is stinging. Okay. All right. Well, it's a lovely episode. I'm glad Diana joined you on... This is a dual episode and I'm glad you were able to be the guest to help close that chapter for her.

Robb: Yeah, it was cool.

Nicki: Yeah. All right, before we jump into that conversation, I'll let you all know what you already know, which is that this Salty Talk episode of the Healthy Rebellion Radio is sponsored by our salty AF electrolyte company LMNT. Folks, winter is officially here and so is LMNT Chocolate Caramel salt. It's now available in a 30-count box, and back for good. There's nothing better on a frigid day than a hot cup of salty goodness. And you can enjoy Chocolate Caramel salt in hot water or stir in a dash of heavy cream or coconut milk or even add it to your morning coffee. Chocolate Caramel was one of three flavors in our last year's Chocolate Medley, and it was the resounding favorite when we surveyed our element customers.

I'll also tease that this year, the Chocolate Medley will be coming out in just a few short weeks. Chocolate Mint will be one of the flavors featured along with two new ones that are sure to make this winter season bright. Folks, as many of you know, everyone needs electrolytes. And if you're an active person or on a low carb diet, you really need electrolytes to feel and perform your best. This is true whether the sun is shining or the snowflakes are falling. So whether you're training for strength endurance or just trying to make it through a grueling workday, make it a point to put electrolytes in your water. Your body and your brain will thank you. LMNT INSIDER Bundle is your best value. You buy three boxes and get the fourth box free. Remember, Chocolate Caramel is now available to add into those INSIDER Bundles. You can grab yours at drinkLMNT.com/robb. That's drinkL-M-N-T.com/R-O-B-B.

Robb: Nicely done, Wife.

Nicki: Thanks, Hubs.

Diana: Hey, everyone. We are doing a dual recording here. I'm here with Robb

Wolf. Say hi, Robb.

Robb: Howdy, good to see you.

Diana: We'll air this both for Robb's channels and also for Sustainable Dish. This is the very last podcast episode for Sustainable Dish. I have been running this podcast for, I don't even know how many years. It started first with Liz Wolfe talking more about farming and everything. And then when Liz had her baby and was also recording another podcast at the same time, I just took over as the host. I pulled in James Connolly for the last couple of years and I've never made a dime on this podcast. Just with all of my travel and all the work I'm doing with my nonprofit, it has just gotten a little too much to be paying someone so much. So even with the sponsorships, we just don't make enough to cover the labor for editing the podcast. And so I'll continue to do some recordings with people as interesting stuff comes out, and as I have time, but as a weekly regular podcast, it's just been a grind. And I know your regular podcast series ended a while back, right?

Robb: We've still been continuing to do a weekly podcast for the most part.

Diana: Oh, okay.

Robb: With moving and stuff like that, it's been super intermittent over the last three months. But it's funny. It's fun and there's always a rock that needs to be pushed up a hill on the sustainability and health topics. There's never not a need but there's a... I've never had cancer, but I've heard people who have had cancer who also do things like a weekly blog or a podcast. They're like similar in that you never feel like you're done with it and you kind of want to be wrapped up at some points. And so I appreciate you drawing a bubble around this stuff. You've contributed so much to this space, both on the health front, but clearly more in-depth on the regenerative ag and kind of a fact and logic-based approach to our food systems. And you were the pointy end of the spear that made a lot of magical stuff happen. So I actually applaud you for pulling the rip cord on this particular thing.

And there's always the opportunity to jump back in if at some point you decide that you want to do that. But I think that too often folks just keep adding things to their plate and I think it's really good to start simplifying and focusing on the areas that make us happy and maybe that we have the most leverage on. Yeah.

Diana: Yeah. I had a list of things we could cover. And actually, the very last thing I was going to bring up with you that I didn't even mention to you before we started recording was, now that we're both... I just turned 50. You're a couple of years ahead of me on that. But what's important?

And what's important now to us versus what was important 10 years ago is very, very different. So I thought we would kind of talk a little bit about the

changes we've seen since first getting into all of this, a few things we predicted that are actually coming true. I want to also touch on this Harvard study that shows that there's an association between red meat and type 2 diabetes. But the very last thing I was going to chat about, and maybe we could get into it now, but the perspective of being a little bit older. I know for me when I first got into paleo, I was like, "Oh my God. No, you can't ever eat popcorn because that's the worst." And now I'm like, "Dude, live your life and have some popcorn and if that works for you, that's fine. Generally stick within a healthy-ish lifestyle, but don't kill yourself."

I don't know if you want to add anything to that, and I'm sure I will think of a few more things. But basically, I'm just like, I have a lot more perspective. I have a lot more nuance. I was on another podcast where I was chatting about Ozempic. And I think maybe 10 years ago I would've been like, "That's evil." And now I'm like, "If someone's not going to do the diet changes and they've got a really stressful life and this is going to keep them out of the hospital and keep them seeing their grandchildren, maybe that's the best solution if they're not going to do anything else. Who am I to..." Making major diet changes, while I say it's an easy thing, it is actually maybe not that easy for everybody. Our modern food environment is so overwhelmingly...

Robb: The deck is so stacked against us, it's crazy. Yeah.

Diana: Right. So I really am just not going to stress it. And it seems to be... There's definitely some concerning side effects with all pharmaceuticals. But at the same time, and I think that can only come with age and also working with people and knowing as a clinician, there's a lot of people that life stressors just get in the way of being able to be spot on with perfect diet all the time.

Robb: Right. Right. It's interesting in the folks that I work with or I try to help, I think I'm much more forgiving at this point in my career, acknowledging that there's more variation and whatnot. But it's funny, I've also been kind of having this resurgence or revitalization in my appreciation of the paleo template. Michael Rose, who's an evolutionary biologist. He's been doing all this research on aging. And he really makes this case that as we get older, one should really consider the possibility that we continually lose the ability to deal with neolithic inputs, and that could be in modern inputs. And that ranges from alcohol to photoperiod and on and on and on. And it's just kind of a risk-reward thing. What type of life do you want to live? What type of health issues do you have now? And for myself, I've had to tighten my dietary issues over time because my rheumatoid arthritis has gotten worse, my essential tremor has gotten worse, and I've been able to manage that stuff fairly well, but the aperture of what my options are have shrunk.

And it's kind of funny, I just did some DNA analysis, which I'm going to go over in a future podcast. I did it with Dr. Andy J., and he was like, "Dude, you have outstanding genetics. You've got some essential tremor stuff." But interestingly,

people with essential tremor tend to live about 15 to 20% longer than the average population. And I guess it's just so we can sit around a seizure salad in our later years and just vibrate or something. I'm not sure. I'm super excited about that if I can't get a full handle on this stuff. But it was interesting that I've oftentimes thought that I was dealt a shy deck of genetics, but it's actually like I've got some really good stuff, super low cardiovascular disease risk, sky-high diabetes risk, which I manage dietarily both type 1 and type 1. stress and inflammation generally will drive my blood sugar up, and I've just empirically known that. So I have to eat low carb. I can't do high fiber because of my gut issues.

Being in a deeper state of ketosis helps me to manage both the autoimmune side of my rheumatoid arthritis, but then also it really seems to benefit my essential tremor. So it's interesting. On the one hand, I am in agreement that it's like, "Live your life, do the things that make you happy, and make this stuff sustainable." But then on the flip side of this, I've got a really chapped acid at the diet culture warriors that are finger-wagging at people about just trying to save their lives.

I'm 51 now. Nikki's mother died three months before we met, and she was 50 years old. She never met her grandkids. And it was like a crater was blown into that family because candy was just this absolute hub of everything that went on. And this may be, I know I'm jabbering like an idiot, but this kind of circles back around to some of the anxiety that I had early in the paleo scene, which was nobody knew anything about this stuff. Nobody knew that diet could influence autoimmune disease and gut issues, and all of this. And this is maybe where I think it feels a little bit better for people like you and myself to be able to step back because in a lot of ways, the cat's out of the bag. There's never not going to be a day in which an autoimmune paleo protocol doesn't get discussed unless our tech overlords expunge it from social media and you can't talk about it, which is maybe something that we could dig into at some point.

But I don't have that same anxiety around... My goal has always just been to give people options because I didn't feel like I had to figure all this stuff out on my own. I was a completely crazy heretic just out there in Crazyville trying to help myself and help other people. And there are thousands of folks now that have a good understanding of whether it's keto or carnivore or autoimmune paleo or what have you, that can really help people with a wide variety of issues going on, continue to publish research in these spaces. So I mean, it's interesting. I'm more lax in some ways, but I've also been becoming kind of the recalcitrant old man that's like, "Well, if you have issues and you want to live the best life that you can, we got to get our shit together." And I know it's not easy, but I did diabetic wound care on my dad for three years as he had his toe and then part of his foot and all of his foot and then a full below-the-knee amputation.

And he would say, "Well, Robb, I guess I'll let him take my foot." And it was almost like he was doing this deal with the universe like, "If they take my

foot, then I'll be fine." And I was like, "Dad you know it doesn't stop with them taking the foot. They're just going to keep whittling parts off of you." And I never want my kids' staff have to do diabetic wound care on me. I never want... Ideally, they cover me in steak and honey and push me out my back door, and one of the grizzly bears in my backyard eats me when I'm 92, and it's a real quick thorough process. So yeah, I'll shut up now. But a lot of thoughts around all that stuff.

Diana: Yeah. That was a nice gag factor there. You're so illustrative sometimes. Well, I guess I agree with you. I guess maybe where all of that stuff is coming from is I feel that... I too have to be pretty on-the-ball with my sleep and photoperiod in addition to my diet.

In fact, I was just invited to participate in a celiac research trial where you would take this enzyme every time before a meal, but then they said, "Oh, but then a few times a week you'd have to eat this fiber bar that has two grams of gluten." And I was like, "Heck, no way. Absolutely not. There's no amount of money you could pay me to challenge myself with gluten for 38 weeks every week. No. What if I had the placebo and I don't even know if your drug works, and no way." So I guess where that energy is coming from about the Ozempic is there are clearly people that are just not going to change, right?

Robb: Right.

Diana: I'm tired of... So if this is going to keep them healthier longer and they're not going to change your diet, then I guess that's what we're looking at right now because I'm... Not that I give up, but I'm a well, and I can't...

Robb: You can only save so many people. And I don't think I'm misstating this, but arguably, you and I have cared far more about the health outcomes of lots of people than they've cared about their own health outcomes, which isn't necessarily healthy and is kind of a great operation for self failure. But also, you and I have been deluged with commentary from people that like, "Oh, my life was saved. Your book changed everything. Your podcast or what have you." And so that is sometimes the impetus to get back in and keep fighting the fight, but you can only do that so much.

And again, the information's out there, other people are spinning up this information and running with it and working with it and everything, and I think that that's where it's reasonable to step back and provide some space for other people to do this stuff.

On the Ozempic thing, just really quickly though, I think we live in this environment where people are really delusional about risk-reward. So if you're morbidly obese or you're having health problems and this Ozempic is maybe going to fix that, that's great. But there's also some percentage of people for whom they lose gastric motility and it appears they never get it back. And then they may be eating through a feeding tube that bypasses their stomach the rest of their life. It seems to be a very low number. It's not a high frequency. But this

was something that was kind of endemic in the COVID story, which was we had lots of things presented to us, and we continue to have lots of things presented to us as if this is a zero-risk solution. And it's not. There's risks associated with everything. And I think that this is something that just folks generally need to get more sophisticated about. Any decision that we make, even a non-decision is a decision, and there's consequences to that.

I think that the modern world doesn't want people to think about the reality that there's just trade-offs to everything. Thomas Sowell has this great statement, I'm going to butcher it. But he said, "There are no solutions. There's only trade-offs." And I think that that's really, really true. So to your point, I agree that some of these weight-loss drugs can be miracles for some people, but folks need to go into it with eyes open that there could be a really gnarly consequence on the backend of that. But if you're looking at dying early due to morbid obesity and all the challenges associated with that, then maybe it's a worthwhile risk to take.

Diana: Yeah, I mean certainly compared to gastric bypass, right?

Robb: Right. Right.

Diana: Which is incredibly invasive, and for the rest of your life, you're going to be nutrient-deprived because your intestines just aren't absorbing. And for some people, that is the only salvation. They absolutely die within a year or two, right?

Robb: Right.

Diana: Without it. And anyway, we don't have to make the whole show about that. Let's dive in real quick before we get to down rabbit holes about this Harvard study real quick.

Robb: Sure.

Diana: Just so we're not just being salty and cranky about the thing and-

Robb: The world at large.

Diana: Multiple issues. It's not really a new study. Walter Willett basically just keeps churning out like, "Hmm. I wonder if there's an association between," I don't know. And you could pick anything. Carrots and heart attacks. You definitely can find any kind of association you want between any two things in a large study where you have people badly recording food frequency questionnaires, right?

Robb: Right.

Diana: And so that's what's happening. These people, we know they rely on food frequency questionnaires. Things like lasagna are recorded as red meat, so we

don't know if they're doing steak and salad or if they're doing lasagna with a side of fries. We don't know that part. Just because it's an association doesn't mean much. There's lots of things that are associated with each other. I think it was movies that Nicholas Cage is in versus the divorce rate in Maine or something are perfectly correlated. And so just because one thing is associated with something else, it doesn't mean that it caused it, even though that's how the media reports it. But then Walter Willett has multiple conflicts of interest that he doesn't declare on these. So I have a list I can rattle through. I don't know if you have any other... I mean there's also just, what they're saying is the proposed mechanism, even though that's not part of this study, but they're saying that is the heme iron that causes an inflammatory situation which can develop into type 2 diabetes. So do you have a commentary on that?

Robb: Yeah, I mean, broadly like John Ioannidis, Dr. John Ioannidis, who's one of the most recognized medical researchers in the world, ages ago, it was maybe eight years ago, 10 years ago, he did a review paper that really made the case that these food frequency questionnaires should be done away with wholesale. They are providing nothing of value to nutritional biochemistry, epidemiology, that they are so flawed in so many ways and you detailed maybe a 10th of the ways that they are flawed. And even those things make them... There's more error than signal in these things.

And broadly, medical research is going through this reproducibility crisis. It's estimated that upwards of 80% of peer-reviewed literature at this point is non-reproducible. That it's bullshit. There's some conflict of interest. There's some weird something about the way the research has been rolled out, that when people do circle back around to try to replicate it, it's non-replicable. And so there's huge issues with that. But yet these things still garner this huge bandwidth from both public health and the media writ large. And some people have kind of hand wrung. They're like, "Well, if we really..."

Gary Taubes has talked about this. If we really wanted to thoroughly answer some of these questions, it would be exorbitantly expensive, and so we just don't do it. But it's really a mess. And it is one of those Groundhog Day-type things that you're just like, "Didn't we talk about exactly this study 10 years ago?" But to your point, there's a little tweak on it. It's still like nurses health data or whatever it is that they're digging into and just rejiggering the stuff that they're looking at to spin up a new piece. And then to your point again, conflicts of interest don't necessarily disqualify somebody from having valuable commentary on something. But the problem with Walter Willett and Harvard School of Public Health writ large is that they aren't really transparent about-

Diana: Exactly.

Robb: ... massive conflicts of interest. Yeah.

Diana: Exactly. And I actually just submitted a paper to the Journal of the Academy of Nutrition and Dietetics, talking about meat's role in both

undernutrition and obesity, and how it can be a powerful ally. I do not know. I submitted it about a month ago, and I have not heard a word from anybody over there. I've got some pretty powerful co-authors on the paper, and it's pretty irrefutable, the evidence that we put forward. And in it, we even talk about the harms that Meatless Monday does through its messaging and the restriction of meat to low-income children.

But I did disclose that I had help from the meat industry paying my time because I'm not employed by university. But here, I'll just rattle off a few of the things. I got these from Nina Teicholz at Nutrition Coalition. But this is just a few stuff that-

Robb: Known conflicts of interest, yeah.

Diana: ... Walter Willett does not disclose. Okay. So between July 16th and June 2017, the Peanut Institute donated between 250 and \$499,000 to the School of Public Health. And then, since March 2016, Willett has published at least two studies that promotes the use of walnuts or peanuts. And we have the Walnut Commission also donating between 100,000 and 249,000. Let's see. Unilever is a major donor. They are one of the world's largest manufacturers of vegetable oils. Willett is a huge proponent of the use of vegetable oils.

We've got... Let's see, Environmental Defense Fund, which is a big promoter of Meatless Mondays. The Nature Conservancy, also a major donor. Their executive director is a vegan. Let's see, the World Health Organization, which recommends at least one plant-based vegetarian option such as tofu or beans for breakfasts. Aramark, Nature's Touch Frozen Foods, major donor. There's major pharmaceutical donors. Willett is an advisor to the Blue Zones. Willett is also on the True Health Initiative, which is pretty much a vegan organization headed by David Katz. And he also has several commercial ventures with David Katz, who is a vegan. Walter Willett has also published many books with this ideology that meat is bad for you. So he's got ideological and financial conflicts of interest that he just simply doesn't disclose on any of his papers, which is unethical. And I'm surprised not more people are calling him out on that.

Robb: There's definitely a double standard that exists in the scene. And this is one of the interesting things is that there is a cross-section of society that is so certain that they are right in their morality, their politics, their worldview, that it's like, "Well, we..." This is so obviously correct that only the other side should be held accountable for conflicts of interest or any disclosures that need to be made. And it's like trying to do brain surgery, wearing oven mitts. These folks, and even for all of us, if we're that divorced from the feedback of reality, we're going to make massive mistakes. And we talked about this with regards to vertical farms and a bunch of the alternative food production things. And we were at a fairly speculative back-of-the-envelope spot, but we were based in economics and thermodynamics, and evolution. And God damn it, we were right

about all that stuff.

And that is another part, that for me, kind of putting a big loop on this thing, why I feel a little bit more comfortable stepping back in some ways with this because all of these proposed systems are going to fail because they just don't work. It's kind of, just because an airplane flies doesn't mean that gravity stops working. We just have this process of aerodynamics. But if the energy fails in the airplane engines, it's going to crash. The anxiety that I've had to some degree is, how much collateral damage and how many people are going to be hurt in the process of these alternate food systems and ways of looking at the world fail. And it's kind of heartbreaking but we... I forget if we mentioned this in the book or if this was too spicy in the book, but I said, "We should just double down on telling moms, 'Yeah, for sure. Be vegan in your pregnancy and raise your infants vegan because the signal of the damage done to those children would be so profound.'"

It's like if there's a graphic novel that was made into a really interesting movie called *The Watchmen*, and it was basically a nuke was detonated in New York City and it was terrible. Millions of people died, but it prevented World War III. It stunned people so much that a few million people died to prevent billions of people dying. And to some degree, I kind of see it similar here. There's so many bad decisions being made around energy and food production and sourcing and what people should and shouldn't eat, that there are going to be a lot of folks hurt, but the signal to that is going to be irrefutable.

And when you start damaging children, people take notice of that. It's kind of one thing if you're a skinny 20-year-old college student and you've managed to motor through a vegan period and suffer some degree of health consequences, but when kids are stunted, when they have developmental issues and the things like what we talked about, that will change things. And I don't know if that's just a cranky, salty way of looking at it, or if it's actually kind of a place of wisdom. No matter how hard we try, we're not going to be able to avert all of this stuff happening. But the failed state of nutrition, science, and these recommendations around food systems, there will be a comeuppance with it. And it's just hopefully, we've let enough people know about it. They're able to navigate that more effectively than what they would've been otherwise. Yeah.

Diana: Well, what's interesting is what I'm seeing now, just because I get all the listservs. I get meat industry listservs, but then I get the alt-meat industry listservs as well. And for the longest time, it was, "This company gets new funding. This company gets new funding." And I'm like, "Oh my God, all this money." And lately, it's been more are fantastical language and more of this cognitive dissidence like, "Okay, well the aliens didn't come yet, but they're going to come. We just have to remove more zippers from our clothes and then we'll be totally saved." And so I'm referencing a cult.

Robb: I remember hearing about that. Yeah. Yeah.

Diana: Yeah. Yeah. Yeah. And it was interesting because basically what happened in this situation was that the end of days was coming. The aliens were going to come. And then when they didn't come, these guys actually got even more evangelical and they were talking about this phenomenon that happens when things look like it's a lie, you actually believe 10 times stronger. That's what I'm hearing now. And so as we see all the stock prices falling for Beyond Meat, Oatly, all these other ones, what we're seeing now is more crazy language coming from those alt-meat and plant-based meat companies. But we're also... I'm noticing more governmental pressure. If we can't get Silicon Valley and investors backing us anymore because financially it's not going to work, then we must convince governments to both subsidize our innovation and production, but also campaigns aimed at swaying consumers. And that's what's happening now. I see it in Canada, major investments from Canada. We've got it in the Netherlands, Denmark. Many, many other countries are investing very heavily from the government in all of this.

Robb: Right. And undermining the current food systems.

Diana: Correct.

Robb: Decommissioning farms, culling cattle, and things like that. It will fail. It will ultimately fail, but there might be massive economic fallout. There might be some starvation. There will certainly be nutrient deficiencies. It will almost certainly worsen the diabetes metabolic issue story, but it's also going to be a really profound signal. We're going to see this trend towards less animal consumption. We've already seen that. But it's like the hypothesis is a linear correlation, exponential correlation between animal product consumption and a litany of diseases. Okay, those products went away. The government actually prevented their production, their dissemination, promoted the exact opposite, we can quantify how these folks changed their diets, and things got worse. And at some point, that system will just break, but there's going to be a lot of damage along the way. And that's part of the reason why I live in Montana. And we're going to... As I look out my office window, there's going to be a bunch of sheep and cows and alpaca and stuff like that here next year to hedge my bets on the way that that whole thing plays out.

Diana: And I'll be huddled down in my pottery shed just making mugs.

Robb: Making tradable items so that we can have a small economy here. Yeah. Yeah.

Diana: All right. Before we totally end, let's just catch up on... Let's catch our listeners up on what we're both doing. So you've got... Things are going really well with LMNT. I should disclose that you guys are big sponsors of me, so thank you very much for that. It's going really well, right?

Robb: It's going wonderfully and I couldn't be happier. I couldn't be more lucky.

It was right place, right time, and an amazing team that has really actioned amazing really well. It's just salt, but we also do some awesome customer service and try to excite and delight things. And just as an aside, our mission with LMNT is health through hydration. The hydration part is like self-evident. It's like sodium, potassium, magnesium check. Okay, cool. That health part is a big story. And we really...

Our guiding principles are driven from this phenomenal paper that was released a couple of years ago, the Hallmarks of Health. And it defined eight different features of what health is. Historically, in medicine, health really didn't have a great definition. It was like the absence of disease, which doesn't really help or define things. I won't go into all eight of the categories, but they really kind of got boiled down to integrity and resilience. And the integrity part is you want some things in and out of your experience and you don't want just willy-nilly exposure, but you also don't want to be walled off in such a way that you can't adapt and grow with your environment.

This thing has been really fascinating as a business principles foundation because it goes from the cellular level to the organismal level to the ecological level, and it has been this guiding light for our business. And some of the stuff that we're looking at doing long-term is actually acquiring ranch land and employing farmers and ranchers to do regenerative ag as part of our peripheral mission. So because the business is successful and because there is a high barrier of entry to get people into doing these types of things, part of our long-term plan is to start setting aside different locations where we get people getting in and doing regenerative ranching and farming and holistic management and the whole nine yards. So it's a really cool thing that this little salt company is kind of blown up to the degree that we can continue to have that impact on just the hydration space, but can really stretch our legs into the broader scope of planetary and individual health.

That's super exciting stuff. And James, our CEO, he likes to quote, there's something that... "The world is good when people plant trees they will never sit under." And that's part of his mission around this, expanding into the regenerative ranching, farming, food production, seeing as that we're investing in stuff that it's going to take decades for it to work. And I'm going to be an old, old person before the flywheel really catches on it, but my kids and their kids are hopefully going to be the ones that benefit from stuff like that with regards to a more stable, robust food system, and just beautiful environment and all that stuff.

Diana: Yeah. There's a beautiful story there too, with hydration of the soil. The more carbon the soil has, the better the water holding capacity, so it's not the rain you get. It's the rain you keep. So there's actually a really nice kind of tying that.

Robb: That's a great angle. I'd never really thought about it that way.

Diana: Yeah. You guys should go down and visit Alejandro down in Chihuahua because he talks about that a lot. Because he gets the same amount of rain. You're driving towards this ranch. He's like, "You're not going to believe it. You're not going to believe it." And we're driving through these kind of sage, brushy, barren lands. And he's like, "This all used to be grasslands and we've completely destroyed it." And then you get to his ranch and it is like Eden. It's so lush. And he's like, "We don't get more rain in this little area. We just are-

Robb: Keep it.

Diana: ... managing it with... Yeah, we're keeping the rain and it's not evaporating off because we have this beautiful cycle here. And so it's a really beautiful system, and I think there's a lot you guys could [inaudible 00:45:05]. Yeah.

Robb: I don't think it would be hard to get the team to it's sign up on doing that, so that would be awesome.

Diana: Yeah. Yeah. I mean, one of the really cool things through GFJA is just all the travel that I've been able to do to places that aren't bucket list places. I would never... No one's ever dying to go to Chihuahua, Mexico in the middle of the desert on a vacation, or Uruguay, for example, was not on my list of places that were even on my radar. I didn't even just consider Uruguay at all, but it was so incredible to go there, and I could live there. Montevideo was so cool. The people were so, so nice. And so I've been just really happy with focusing more on the work I'm doing through GFJA, getting invited to speak at different conferences. It is a little bit of a challenge when I was at COP27 in Egypt. I'm not going this year. It's in Dubai. I'd rather not be in the Middle East right now.

Robb: Yeah, definitely.

Diana: I'm kind of relieved that there wasn't a badge that came through for me for this year. It was a little tough to be in Egypt last year too. I have to be honest. As a Western woman going to Egypt, I was very aware of very strong elements in the culture there that are not pro-woman. But once I was down on the ground at COP, I mean, just the energy, "We can only save people with a plant-based diet." I mean, that is what everyone's talking about. There were very few pro-livestock and no nutritionists promoting the consumption of livestock. I was the only one. And there were thousands and thousands of people there. So we still have a lot of work to do in that space. And we're doing some other cool things like getting meat sticks into kids' Backpack Program. I'm looking at a cowherd school program, so paying ranchers.

Right now, there's a lot of ranchers that are just part of programs where they have to take on the burden of the donation, but I'm looking at actually paying them through public support and maybe some corporate partners to get in there and actually reimburse the rancher for donating a full animal to a school lunch program.

Robb: Oh, awesome.

Diana: Very, very excited about that. And hopefully some more videos for schools with Nick Offerman, if LA ever gets out of this quant. I don't even know if they're still in this writer's strike. I think it's still going on.

Robb: I think so. Yeah, parts it. Yeah.

Diana: But we certainly have a lot of work that we're doing there, and it's been a lot more rewarding than trying to beat the pavement and play the social media game, which is getting tiring.

Robb: Right. Shocker. Well, you've done it for a long time. When did we really meet? Was it like 2009?

Diana: It was through Matt Leland.

Robb: It was through Matt Leland.

Diana: And it was Matt at the first AHS in LA, which was probably 2011.

Robb: '11, yeah. So it's a pretty good run, I think.

Diana: Yeah.

Robb: Yeah. Yeah. And so much has changed in the... And it is interesting. When I wrote *The Paleo's Solution* and *Wired to Eat*, they're good books, I am proud of them and everything, but immediately upon them being written, I was like, "Oh, I wish I had done this study. I wish I had done this piece." And it wasn't like the material was inherently wrong, but it gets dated quickly. And I got to say, *Sacred Cow* just gets more and more solid every day that goes by. The implosion of *Impossible Foods* and *Oatly*. And clearly, like you said, with these international meetings so focused on plant-based diets, there's still a lot of work that needs to be done. But there are resources out there that lay out a credible explanation for the way that things have been, the way that they are now, and then I think the most important piece is, it provides a predictive framework for, if we're right about what we're saying, "These are the five things that we're going to see," and we've been really banging on with that stuff.

It's funny, there's a bunch of development happening here in Bozeman. And one of the things that folks are wanting to do, there's this urban farm concept, which is really, really cool, but they want to do this greenhouse, and they've just been twisted inside-out because they're like, "I just don't think this thing is economically viable." And I was like, "It's not. Let me show you where we talk about this," the crunchy water story around lettuce and stuff. And so we actually rejiggered it and looked at that as a venue for weddings all year round, growing the flowers there, and then also culinary herbs. And all of a sudden, this

thing is economically viable and it makes sense, and it doesn't need subsidies for it to make sense. And they were like, "Are you a farmer or anything?" I'm like, "No, we've just done a lot of work in this space."

That was actually kind of cool. We had only been here maybe a week, and I got invited to this planning thing because of Sacred Cow.

Diana: Oh, cool.

Robb: Stood up talking to a bunch of engineers and urban planners, and I think had a lot of... Folks were not real stoked to hear what I had to say initially, but by the end of it, it was like, "Oh..." I brought a bunch of books and handed those out, and I think we just did some very back-of-the-envelope numbers shifting the emphasis of this thing. It's like, "You're not going to grow food indoors unless you're on Mars, unless you're on a spaceship. That's the only place that makes sense when you have sunlight and grass and grazing animals in particular. That's where we win." And it was kind of cool because a lot of the old school Montanans, they were like, "Well, this is what we've been doing forever." I'm like, "Exactly. Just keep doing that, but do it even better than what you've done." Yeah.

Diana: Yeah. The governor of Montana had reached out to me. I don't know if I mentioned this to you because they were doing some beef initiatives. Anyway, I'll make a connection offline with you, but maybe since you're-

Robb: That'd be awesome. He's pretty cool.

Diana: Oh yeah?

Robb: He's pretty cool. I forget the exact story. But when he was running for office, this reporter was totally shit-talking him and Gianforte punched the dude, knocked him out, and then he had to pay him some hush money to not. But he's Italian, Gianforte, but also kind of old-school Montana but I like the guy. I don't agree with everything he does. I don't think he's got his feet on the ground with everything, but he's pretty legit. Yeah.

Diana: Yeah, funny. All right. Any parting words before we-

Robb: Just honored to have you as my partner on a bunch of these projects. And I frequently have kind of gotten more airplay for a variety of things or significant airplay, but you have been the guiding light and the moral and intellectual framework behind so much of this stuff. I wanted to do this, but you were really like the squeaky wheel that made it happen. So I can't thank you enough for the work that you've done, and I'm really stoked that you are also carving out some space so that you can put your leverage in the spots that you feel like are the most important.

Diana: Oh, thank you so much. Well, your support has been really critical for me.

We never would've made it onto Joe Rogan without you being a co-author on that. And I know how many people that reached. I still get messages all the time, and it's always nice for me to collaborate with someone. It helps me keep going, and yeah, it's been really fun working with you, and hopefully, we'll do more stuff in the future.

Robb: Awesome.

Diana: Thank you.

Robb: For sure.

Nicki: All right. That is a wrap for that conversation. Any closing thoughts?

Robb: No, just I think that it's always interesting when one shifts careers or shifts-

Nicki: Focus.

Robb: ... focus in life. And Diana is going to continue to do work in this regenerative front and in the nutrition and health front, but the front-facing part of this is a grind. What is necessary to really be successful in social media and whatnot? It almost trains one to be an idiot in a way, and all due respect to people who are succeeding in this. If you're enjoying it, that's great. But the incentives seem difficult and misaligned, and I think at a certain point you're like, "Okay, I've pushed that rock up that hill enough times and it's good to move on."

Nicki: And when you're a single operator like she is doing this work and also managing all of that stuff, especially with a topic as contentious as nutrition and regenerative ag is on the social media platforms, it can be pretty soul depleting, so I'm actually really happy for her that she's made this decision and hopefully, this next chapter will be much more restorative for her.

Robb: Absolutely.

Nicki: All right, folks. As always, check out our show sponsor LMNT at drinkLMNT.com/Robb. Please stay safe out there, stay warm, and we'll see you next time.

Robb: Bye, everybody.

Nicki: Bye.